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MODEL DIET TABLES.

PREPARED BY ORDER OF THE MICHIGAN STATE BOARD OF HEALTH,

BY

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MEMBER OF THE STATE BOARD OF HEALTH.

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MODEL DIET TABLES, PREPARED BY ORDER OF THE MICHIGAN STATE BOARD OF HEALTH,

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FOODS.

Foods may be defined as substances which, when taken into the body, aid in building up or repairing tissues, or, by being oxydized or burned, generate force or energy.

In the growing child a considerable portion of the food is converted into bone, muscle and brain. In the person convalescing from an acute wasting disease, such as typhoid fever, it is plain to see that the increased consumption of food leads to the repair of the tissues which have been reduced by the disease. In all, food is necessary in order to maintain the temperature of the body, and to enable us to put forth either physical or mental effort.

Our ordinary foods consist of certain food-stuffs or alimentary principles, together with a greater or less amount of wholly indigestible substances. Thus, oatmeal is a food containing the food-stuffs, gluten, starch and fat, with a certain amount of cellulose (cell structure) which is excreted unchanged. The nutritive value of a food depends upon the kind and amount of these food-stuffs which it contains. Since no satisfactory discussion of foods can be carried on until we become acquainted with those constituents upon which their values depend, we will briefly consider the food-stuffs. Fortunately these are not numerous, and may be divided into the following classes:

- (1) Albumens or proteids.
- (2) Fats or oils.
- (3) Starches or carbohydrates.
- (4) Inorganic salts.
- (5) Water.

Albumens or Proteids.

To this group belong some of the most important food-stuffs. They all contain nitrogen, and for this reason foods rich in these constituents are called "nitrogenous foods." The chief proteids are ordinary albumen, as the white of egg, casein of milk, fibrin of meat, gluten of grains, flour and meal, and legumen of peas and beans. The amount of proteids in the various foods is variable, as will be seen further on.

When we know that the blood, muscles and all the vital organs contain proteids as their chief constituents, we can understand the importance of taking food rich in one or more members of this group. The average workingman requires in his daily food not less than four ounces of pure proteid. The digestive and assimilative organs have the power of converting one proteid into another, but they are not able to form a proteid out of fat or starch. For this reason no other food-stuff can, without injury, be a substitute for the proteids in our food for any length of time.

Fats.

Fats, when oxidized or burned in the body, produce more force than will arise from the combustion of an equal weight of any other food-stuff. In cold countries the inhabitants instinctively consume large amounts of fat on account of the heat which is generated from it. The workingman requires not less than two ounces of fat per day. Fat is best digested when taken in a finely divided form and with some other food.

Starches or Carbohydrates.

To this group belong a number of substances of similar chemical composition, and most of them are found most abundantly in vegetable foods. The most important are starch, sugar, gum and dextrine. Like the fats, they are consumed in giving energy to the body, though a much larger amount of the carbohydrates is required to yield the same result. The daily need of this food-stuff to the average workingman is between 17 and 18 ounces. The cellulose or cell structure of plants is closely allied to the members of this group, and any cellulose that is absorbed must first be converted into sugar.

Mineral Salts.

The bones of the adult man contain as much as 70 per cent of mineral matter, the greater part of which is phosphate of lime. Smaller quantities of the phosphate of magnesium and the carbonate of lime also exist in bones. The muscles, blood and other tissues contain salts of potash, soda and some iron. One of the most important mineral foods is common salt or the chloride of sodium.

Water.

About 70 per cent of the adult body is water. It forms the greater part of the blood, in which it serves as the carrier of other substances, some in solution, others held in suspension. Besides the fluids, the solid tissues contain a greater or less proportion of water; the muscles contain as much

as 75 per cent. There is also a constant loss of water by evaporation from the skin, by exhalation from the lungs, and by excretion from the kidneys and bowels. This loss must be made good by the drinking of water, and by taking foods more or less rich in this constituent.

NUTRITIVE VALUE OF FOODS.

The following table, taken from the very valuable work of König, gives the per cents of food-stuffs in our ordinary foods:

A.—Animal Foods.

	Proteids. Per Cent.	Fats. Per Cent.	Carbo- hydrates. Per Cent.	Salts. Per Cent.	Water. Per Cent.
Beef, very fat.....	17	26.5	-----	1	55.5
Beef, moderately fat.....	21	5.5	-----	1	72.5
Beef, lean.....	21	1.5	-----	1	76.5
Veal, fat	19	7.5	-----	1	72.5
Veal, lean.....	20	1	-----	1	78.0
Mutton, very fat	15	36	-----	1	48.0
Mutton, moderately fat.....	17	6	-----	1	76.0
Pork, fat.....	14.5	37.5	-----	1	47.0
Pork, lean.....	20	7	-----	1	72.0
Goose, fat.....	16	45.5	-----	0.5	38.0
Chicken, moderately fat.....	20	4	-----	1	75.0
Game	22.5	1	-----	1	75.5
Blood.....	18	0.2	-----	0.8	81.0
Tongue.....	14.5	17	-----	1	67.5
Heart	18	8	-----	1	73.0
Lungs	15.5	2.5	-----	2	80.0
Kidneys.....	18.5	4	-----	1	76.5
Liver.....	20	4	-----	1.5	74.5
Tallow	0.5	98.2	-----		1.3
Lard.....	0.3	99	-----		0.7
Salmon (fresh or canned).....	16	6.5	-----	1	76.5
Salmon (smoked).....	24.2	12.3	-----	12	51.5
Herring (cured).....	19	18.1	-----	16.5	46.4
Cod fish (cured).....	80	1	-----	1.5	17.5
Smoked beef.....	27	15.5	-----	10.5	47.0
Smoked tongue.....	24.5	31.5	-----	8.5	35.5
Cured ham.....	24	36.5	-----	10	29.5
Sausage.....	28.5	40	-----	7	24.5
Blood sausage.....	12	11.5	25	2	49.5
Liver sausage.....	16	26.5	6.5	2.5	48.5

A.—Animal Foods.—Continued.

	Proteids. Per Cent.	Fats. Per Cent.	Carbo- hydrates. Per Cent.	Salts. Per Cent.	Water. Per Cent.
Pea sausage.....	16	39.5	29.5	9	6.0
Eggs.....	12.5	12	-----	1	74.5
Woman's milk.....	2.5	4	6	0.5	87.0
Ass' milk.....	2.2	1.6	6	0.5	89.7
Goats' milk.....	3.5	4	4.4	0.8	87.3
Cows' milk (unskimmed)	3.4	3.6	4.8	0.7	87.5
Cows' milk (skimmed).....	3.1	0.7	4.8	0.7	90.7
Condensed milk (without sugar).....	14.6	14	15.4	2.4	53.7
Condensed milk (with sugar).....	12.2	10.8	49.4	2.3	25.3
Infants' foods.....	12	5	75.0	2	6.0

B.—Vegetable Foods.

	Proteids.	Fat.	Carbo- hydrates.	Ash.	Water.	Woody Fiber.
Beans.....	23	2	53.5	3.5	14	4
Peas.....	23	2	52	2.5	15	5.5
Lintels.....	25.5	2	54	3	12	3.5
Rice.....	8	1	76.5	1	13	0.5
Wheat flour (fine).....	10	1	75.2	0.5	13	0.3
Wheat flour (coarse).....	12	1.5	71.5	1	13	1.0
Rye flour.....	11.5	2	69.5	1.5	14	1.5
Oat meal.....	14.5	6	65	2	10	2.5
Buckwheat flour.....	9.5	2	72.5	1.5	13	1.5
Ground peas and beans.....	25	2	56.5	2.5	13	1.0
Starches.....	1	-----	83.6	0.4	15	-----
Macaroni.....	9	0.5	76.5	1	13	-----
Wheat bread (fine).....	7	0.5	55.2	1	36	0.3
Wheat bread (coarse).....	6	0.5	51.9	1	40	0.6
Rye bread.....	6	0.5	49.5	1.5	42	0.5
Hard tack.....	7.5	0.5	52	1.5	37	1.5
Potatoes.....	2	-----	20.7	1	75.5	0.8
Beets.....	1	-----	9	1	88	1
Spinach.....	2.5	0.5	6	2	88	1
Asparagus.....	2	-----	2.5	0.5	94	1
String beans.....	3	-----	6.5	0.5	89	1
Green peas.....	6.4	0.5	12.1	1	78	2
Green beans.....	5.5	0.5	7	1	84	2
Fresh fruit.....	0.5	-----	10	0.5	85	4
Dried fruit.....	2.5	1	55	1.5	30	10

In order for a food to be of value it must not only contain food-stuffs, but these must be presented in a digestible form. The appearance, odor and taste of a food influence the digestion by stimulating or retarding, as the case may be, the flow of the digestive juices. We all know that a good piece of meat is often rendered worthless by improper cooking.

Volume of Food.

It is also desirable that the volume of the food taken should be large enough to satisfy the appetite, and still not so great as to prove burdensome. For this reason foods poor in certain food-stuffs are usually taken with some other food rich in these constituents. Thus, the potato, which contains not more than two per cent of proteids, is usually eaten with meat, which contains from fourteen to twenty-one per cent of proteids; or we may say with equal propriety that because the meat contains no starch, man has learned to take with it the potato whose chief constituent is starch. If one should attempt to live upon potatoes only, the weight of the food that he would have to take each day in order to get the minimum quantity of proteid upon which life could be sustained would not be less than ten or twelve pounds. Dr. Edward Smith actually found some of the poorest Irish laborers confined almost exclusively to potatoes and consuming the amount given above. This would lead to distension of the digestive organs and render one dull and stupid. The digestive organs of plant eating animals form from fifteen to twenty per cent of the entire body weight. In flesh eating animals these organs form only from five to six per cent of the body weight. In man the proportion is from seven to eight per cent. Thus, man, upon this point at least, holds an intermediate position between flesh eating and plant eating animals, being more closely allied to the former than to the latter. However, as the proper cooking of the food aids digestion, man may digest some of the vegetable foods even more quickly and completely than the ox can. But his food should not consist wholly of vegetable products.

Cost of Food.

In the following table, the amounts given refer to the raw food. The prices are average retail figures, and when food is bought in quantity the cost of the daily ration will be much reduced. Any variation in price from the figures given should be noted and a corresponding correction made in the footing. Tables similar to these were prepared by the writer three years ago,* and have been extensively followed in prisons, work-houses, asylums, boarding houses and private families with satisfactory results. It will be seen that in each table the various food-stuffs are provided for in proper proportions. Diet tables in which this is not done are never either economical or healthy. The amounts given are those required by a healthy, working adult. To the cost of the raw food, as given in the tables, is to be added the cost of cooking, fuel, keeping the table, and of furnishing seasoning, such as salt, pepper and mustard. Where six or more persons eat together, the cost of the above items, including enough to pay the wages of the cook and waiters, is from 35 to 50 cents per week for each boarder. This increases the daily cost of board by from five to seven cents above the figures given in the tables.

* Published in "Prize Essays of the American Public Health Association, 1885," pages 27-33.

The small amount of nutritive matter in tea and coffee is not considered. According to the investigations of Mr. Fellows, 224 five-ounce cups of tea beverage are made from one pound of tea, and 45 eight-ounce cups from a pound of coffee. This makes the cost of an ordinary cup of tea, when the leaf sells at 75 cents per pound, about one-third of a cent; and of a cup of coffee, when the berry sells at from 27 to 30 cents per pound, about two-thirds of a cent.

CLASS I.—VERY CHEAP DAILY RATIONS, WITHOUT MEAT, FOR THE WINTER SEASON.

Class I.—No. I.

Foods.—Quantities.	Proteids. Ounces.	Fats, Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 oz. oat meal.....	0.29	0.12	1.300	2	4 cents per lb.
1 pt. milk.....	0.54	0.57	0.760	3	6 cents per qt.
10 oz. bread.....	0.70	0.05	5.52	1½	3 cents per lb.
½ oz sugar			0.470	2	8 cents per lb.
<i>Dinner:</i>					
24 oz. potatoes.....	0.48	.....	4.960	1½	60 cents per bu.
1 oz. lard (for cooking the potatoes)*.....		0.99	.....	2	10 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1½	3 cents per lb.
<i>Supper:</i>					
4 oz. beans.....	0.92	0.08	2.140	1	4 cents per lb.
1 oz. lard*.....		0.99	.....	2	10 cents per lb.
6 oz. bread.....	0.42	0.03	3.31	1½	3 cents per lb.
½ oz. sugar			0.470	2	8 cents per lb.
5 oz. tea, infusion .....			.....	2	75 cents per lb.
Totals.....	4.05	2.88	24.45	13	

* The lard, mentioned in these tables, is for cooking.

Class I.—No: 2.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i> 2 oz. cheese (toasted).....	0.50	0.58	0.04	1½	12 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1%	3 cents per lb.
8 oz. coffee decoction.....				%	27 cents per lb.
<i>Dinner:</i> 4 oz. beans.....	0.92	0.08	2.14	1	4 cents per lb.
1 oz. lard.....		0.99		%	10 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1%	3 cents per lb.
<i>Supper:</i> 4 oz. rice.....	0.32	0.04	3.06	2	8 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
1 oz. sugar.....			0.94	%	8 cents per lb.
6 oz. bread.....	0.42	0.03	3.31	1½	3 cents per lb.
Totals	4.10	2.39	21.29	44 $\frac{1}{6}$	

Class I.—No. 3.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i> 4 oz. graham flour (or fried mush).....	0.48	0.06	2.86	%	2 cents per lb.
1 oz. lard.....		0.99		%	10 cents per lb.
1 oz. sugar (or syrup).....			0.94	%	8 cents per lb.
8 oz. coffee.....				%	27 cents per lb.
<i>Dinner:</i> 1 oz. macaroni.....	0.09		0.76	1½	20 cents per lb.
4 oz. fat cheese.....	1.00	1.16	0.08	3	12 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1%	3 cents per lb.
<i>Supper:</i> 16 oz. bread	1.12	0.08	8.83	3	3 cents per lb.
16 oz. potatoes (baked).....	0.32		3.31	1	60 cents per bu.
1 pt. milk	0.54	0.57	0.76	3	6 cents per qt.
Totals	4.25	2.91	23.06	15 $\frac{5}{12}$	

Class I.—No. 4.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 oz. oat meal.....	0.29	0.12	1.30	½	4 cents per lb.
½ pt. of milk.....	0.27	0.28	0.88	1½	6 cents per qt.
½ oz. sugar			0.47	½	8 cents per lb.
1 oz. cod fish.....	0.80	0.01	-----	%	10 cents per lb.
1 oz. lard.....		0.99	-----	%	10 cents per lb.
6 oz. bread	0.42	0.03	3.31	1½	3 cents per lb.
<i>Dinner:</i>					
4 oz. baked heart.....	0.72	0.32	-----	2½	10 cents per lb.
8 oz. potatoes	0.16	-----	1.65	½	60 cents per bu.
10 oz. bread.....	0.70	0.05	5.52	1½	3 cents per lb.
<i>Supper:</i>					
2 oz. rice	0.16	0.02	1.53	1	8 cents per lb.
½ oz. sugar			0.47	½	8 cents per lb.
½ pt. milk.....	0.27	0.28	0.88	1½	6 cents per qt.
6 oz. bread	0.42	0.03	3.31	1½	3 cents per lb.
Totals.....	4.51	2.13	18.32	13½	

Class I.—No. 5.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
8 oz. buckwheat flour (as cakes)	0.76	0.16	5.80	1½	3 cents per lb.
1 oz. sugar			0.94	½	8 cents per lb.
½ oz. lard.....		0.49	-----	%	10 cents per lb.
8 oz. coffee.....			-----	%	27 cents per lb.
<i>Dinner:</i>					
4 oz. beans	0.92	0.08	2.14	1	4 cents per lb.
½ oz. lard.....		0.49	-----	½	10 cents per lb.
16 oz. bread	1.12	0.08	8.83	3	3 cents per lb.
<i>Supper:</i>					
16 oz. bread	1.12	0.08	8.83	3	3 cents per lb.
1 oz. butter.....		0.83	-----	1½	24 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	½	6 cents per qt.
Totals.....	4.19	2.49	26.92	13½	

Class I.—No. 6.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i> 8 oz. corn meal (as mush).....	0.78	0.36	5.47	1	2 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
<i>Dinner:</i> 16 oz. potatoes (baked).....	0.32	.....	3.31	1	60 cents per bu.
4 oz. graham flour (as pudding).....	0.48	0.06	2.86	½	2 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
¼ oz. sugar.....	.....	.....	0.47	¾	8 cents per lb.
16 oz. bread.....	1.12	0.08	8.83	3	3 cents per lb.
1 oz. butter.....	.....	0.83	.....	1½	24 cents per lb.
<i>Supper:</i> 16 oz. bread.....	1.12	0.08	8.83	3	3 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
Totals.....	4.90	2.54	31.18	16½	

Class I.—No. 7.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i> 2 oz. rice (as rice cakes).....	0.16	0.02	1.53	1	8 cents per lb.
1 egg.....	0.12	0.12	.....	1½	16 cents per doz.
½ oz. lard.....	.....	0.49	.....	½	10 cents per lb.
6 oz. bread.....	0.42	0.03	3.31	1½	3 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
<i>Dinner:</i> 4 oz. beans.....	0.92	0.08	2.14	1	4 cents per lb.
½ oz. lard.....	.....	0.49	.....	½	10 cents per lb.
6 oz. bread.....	0.42	0.03	3.31	1½	3 cents per lb.
<i>Supper:</i> 2 oz. fat cheese.....	0.50	0.58	0.08	1½	12 cents per lb.
16 oz. bread.....	1.12	0.08	8.83	3	3 cents per lb.
Totals.....	4.20	2.49	19.96	13½	

CLASS II.—VERY CHEAP DAILY RATIONS WITH MEAT.

Class II.—No. 1.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast :</i>					
2 oz. codfish.....	1.60	0.02	.....	1½	10 cents per lb.
1 oz. lard.....	.....	0.99	.....	1½	10 cents per lb.
6 oz. bread.....	0.42	0.03	3.31	1½	3 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
1 cup of tea, 5-oz.....	.....	.....	.....	½	75 cents per lb.
½ oz. sugar.....	.....	.....	0.47	½	8 cents per lb.
<i>Dinner :</i>					
16 oz. potatoes.....	0.32	.....	3.31	1	60 cents per bu.
1 oz. lard.....	.....	0.99	.....	%	10 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1½	3 cents per lb.
<i>Supper :</i>					
10 oz. bread.....	0.70	0.05	5.52	1½	3 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
½ oz. sugar.....	.....	.....	0.47	½	8 cents per lb.
2 cups tea, 5-oz. each.....	.....	.....	.....	%	75 cents per lb.
Totals.....	4.28	2.69	19.36	12½	

Class II.—No. 2.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast :</i>					
2 oz. fat cheese.....	0.50	0.58	0.04	1½	12 cents per lb.
6 oz. bread.....	0.42	0.03	3.31	1½	3 cents per lb.
1 cup coffee, 8-oz.....	.....	.....	.....	%	27 cents per lb
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
½ oz. sugar.....	.....	.....	0.47	½	8 cents per lb.
<i>Dinner :</i>					
4 oz. beans.....	0.92	0.08	2.14	1	4 cents per lb.
2 oz. bacon.....	0.29	0.75	.....	1½	12 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1½	3 cents per lb.
<i>Supper :</i>					
1 oz. bread.....	0.70	0.05	5.52	1½	3 cents per lb.
½ oz. sugar.....	.....	.....	0.47	½	8 cents per lb.
½ pint milk.....	0.27	0.28	0.38	1½	6 cents per qt.
2 cups coffee, 8 oz. each.....	.....	.....	.....	1½	27 cents per lb.
Totals.....	4.07	2.10	18.23	14½	

Class II.—No. 3.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 eggs.....	0.24	0.24	-----	2½	16 cents per doz.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
1 oz. butter.....	-----	0.83	-----	1½	24 cents per lb.
<i>Dinner:</i>					
2 oz. bacon.....	0.29	0.75	-----	1½	12 cents per lb.
8 oz. turnips.....	0.08	-----	0.72	½	1 cent per lb.
8 oz. corn meal (as bread).....	0.78	0.36	5.47	1	2 cents per lb.
<i>Supper:</i>					
8 oz. mutton (moderately fat).....	1.36	0.48	-----	8	16 cents per lb.
16 oz. bread.....	1.12	0.08	8.83	3	3 cents per lb.
Totals.....	4.97	3.35	20.19	22½	

Class II.—No. 4.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
4 oz. fresh fruit.....	0.02	-----	0.40	1	4 cents per lb.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
½ oz. sugar.....	-----	-----	0.47	½	8 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
1 oz. butter.....	-----	0.83	-----	1½	24 cents per lb.
<i>Dinner:</i>					
4 oz. garden beans.....	0.22	0.02	0.38	1	4 cents per lb.
8 oz. beef (moderately fat).....	1.68	0.45	-----	8	16 cents per lb.
16 oz. bread.....	1.12	0.08	8.83	3	3 cents per lb.
<i>Supper:</i>					
8 oz. corn meal (as mush).....	0.78	0.36	5.47	1	2 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
Totals.....	5.19	2.43	21.00	21½	

Class II.—No. 5.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 oz. oat meal.....	0.21	0.12	1.30	½	4 cents per lb.
½ oz. sugar.....			0.47	½	8 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
2 oz. sausage (best quality).....	0.57	0.80	-----	1½	12 cents per lb.
1 cup tea, 5-oz.....				½	75 cents per lb.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
<i>Dinner:</i>					
4 oz. beans.....	0.92	0.08	2.14	1	4 cents per lb.
1 oz. bacon.....	0.14	0.37	-----	½	12 cents per lb.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
<i>Supper:</i>					
1 oz. bread.....	0.70	0.05	5.52	2	3 cents per lb.
1 oz. butter.....		0.83	-----	1½	24 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
½ oz. sugar.....			0.47	½	8 cents per lb.
2 cups tea, 5 oz. each				½	75 cents per lb.
Totals.....	4.28	2.89	19.48	14½	

Class II.—No. 6.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 eggs.....	0.24	0.24	-----	2½	16 cents per doz.
2 oz. codfish.....	1.60	0.02	-----	1¼	10 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1½	3 cents per lb.
1 oz. lard.....		0.99	-----	½	10 cents per lb.
<i>Dinner:</i>					
16 oz. potatoes.....	0.32	-----	3.31	1	60 cents per bu.
1 oz. lard.....		0.99	-----	½	10 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1½	3 cents per lb.
<i>Supper:</i>					
8 oz. corn meal (as mush).....	0.78	0.36	5.47	1	2 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
Totals.....	4.61	2.96	20.20	12½	

Class II.—No. 7.

Foods.—Quantities.	Proteids. Ounces.	Fats, Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 oz. fat cheese	0.50	0.58	0.04	1½	12 cents per lb.
10 oz. bread	0.70	0.05	5.52	1½	3 cents per lb.
½ pt. milk	0.27	0.28	0.38	1½	6 cents per qt.
½ oz. sugar			0.47	½	8 cents per lb.
1 cup coffee, 8-oz.				½	27 cents per lb.
<i>Dinner:</i>					
2 oz. bacon	0.29	0.75		1½	12 cents per lb.
4 oz. beans	0.92	0.08	2.14	1	4 cents per lb.
8 oz. corn meal (as bread)	0.78	0.36	5.47	1	2 cents per lb.
<i>Supper:</i>					
1 oz. bread	0.70	0.05	5.52	1½	3 cents per lb.
½ pt. milk	0.27	0.28	0.38	1½	6 cents per qt.
Totals	4.38	2.43	19.92	12½	

CLASS III.—MODERATELY CHEAP DAILY RATIONS.

Class III.—No. 1.

Foods.—Quantities.	Proteids. Ounces.	Fats, Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
4 oz. beef (very fat)	0.68	1.06	-	4	16 cents per lb.
16 oz. potatoes	0.32	-	3.31	1	60 cents per bu.
1 pt. milk	0.54	0.57	0.76	3	6 cents per qt.
8 oz. bread	0.56	0.04	4.41	1½	3 cents per lb.
<i>Dinner:</i>					
4 oz. beef (moderately fat)	0.84	0.22	-	4	16 cents per lb.
16 oz. potatoes	0.32	-	3.31	1	60 cents per bu.
8 oz. bread	0.56	0.04	4.41	1½	3 cents per lb.
<i>Supper:</i>					
2 oz. oat meal	0.29	0.12	1.01	½	4 cents per lb.
½ pt. milk	0.27	0.28	0.38	1½	6 cents per qt.
½ oz. sugar			0.47	½	8 cents per lb.
Totals	4.38	2.13	18.06	18½	

Class III.—No. 2.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
1 oz. cod fish.....	0.80	0.01	.....	½	10 cents per lb.
16 oz. potatoes.....	0.32	.....	3.31	1	60 cents per bu.
1 oz. lard.....	.....	0.99	.....	½	10 cents per lb.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
½ pint milk.....	0.27	0.28	0.38	1½	6 cents per qt.
½ oz. sugar.....	.....	.....	0.47	½	8 cents per lb.
1 cup coffee, 8-oz.....	.....	.....	.....	½	27 cents per lb.
<i>Dinner:</i>					
8 oz. beef (moderately fat).....	1.68	0.45	.....	8	16 cents per lb.
8 oz. corn meal (as bread).....	0.78	0.36	5.47	1	2 cents per lb.
<i>Supper:</i>					
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
½ oz. sugar.....	.....	.....	0.47	½	8 cents per lb.
4 oz. rice.....	0.32	0.04	3.06	2	8 cents per lb.
Totals.....	5.27	2.74	18.33	20 $\frac{5}{12}$	

Class III.—No. 3.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 oz. mackerel.....	0.46	0.13	.....	1½	12 cents per lb.
8 oz. bread (as pancakes).....	0.56	0.04	4.40	1½	3 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per lb.
1 cup coffee, 8-oz.....	.....	.....	.....	½	27 cents per lb.
<i>Dinner:</i>					
4 oz. boiled mutton.....	0.68	0.24	.....	3	12 cents per lb.
4 oz. boiled rice.....	0.32	0.04	3.06	2	8 cents per lb.
8 oz. mashed potatoes.....	0.16	.....	1.65	½	60 cents per bu.
8 ounces boiled turnips.....	0.08	.....	0.72	½	1 cent per lb.
½ pt. milk.....	0.27	0.28	0.38	½	6 cents per qt.
1 oz. butter.....	.....	0.83	.....	1½	24 cents per qt.
4 oz. bread.....	0.28	0.02	2.20	½	3 cents per lb.
<i>Supper:</i>					
4 oz. cold mutton.....	0.68	0.24	.....	3	12 cents per lb.
1 oz. bread.....	0.70	0.05	5.52	2	3 cents per lb.
Totals.....	4.46	2.15	18.31	19 $\frac{11}{12}$	

Class III.—No. 4.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
4 oz. fried liver.....	0.80	0.16	-----	2½	10 cents per lb.
1 oz. lard.....	-----	0.99	-----	¾	10 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1⅓	3 cents per lb.
<i>Dinner:</i>					
2 oz. bacon.....	0.29	0.75	-----	1⅓	12 cents per lb.
8 oz. cabbage.....	0.24	-----	0.64	¾	1 cent per lb.
8 oz. corn meal (as bread)	0.78	0.36	5.47	1	2 cents per lb.
<i>Supper:</i>					
2 oz. dried fruit (as sauce)	0.05	-----	1.10	1	8 cents per lb.
16 oz. bread.....	1.12	0.08	8.83	3	3 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
Totals.....	4.52	2.96	22.32	15	

Class III.—No. 5.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
4 oz. fresh fruit (berries)	0.02	-----	0.40	2	8 cents per lb.
10 oz. bread.....	0.70	0.05	5.52	1⅓	3 cents per lb.
1 pt. milk	0.54	0.57	0.76	3	6 cents per qt.
1 oz. sugar.....	-----	-----	0.94	¾	8 cents per lb.
<i>Dinner:</i>					
2 oz. bacon.....	0.29	0.75	-----	1⅓	12 cents per lb.
4 oz. string beans.....	0.12	-----	0.26	2	8 cents per lb.
8 oz. corn meal (as bread)	0.78	0.36	5.47	1	2 cents per lb.
<i>Supper:</i>					
16 oz. bread.....	1.12	0.08	8.83	3	3 cents per lb.
1 pt. milk	0.54	0.57	0.76	3	6 cents per qt.
Totals.....	4.11	2.38	22.94	17½	

Class III.—No. 6.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
4 oz. beef.....	0.84	0.22	.....	4	16 cents per lb.
4 oz. bread.....	0.28	0.02	2.20	½	3 cents per lb.
4 oz. buckwheat (as cakes).....	0.38	0.08	2.90	½	3 cents per lb.
1 oz. sugar (as syrup and for coffee).....	.....	.....	0.94	½	8 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
1 cup coffee, 8-oz.....	.....	.....	.....	½	27 cents per lb.
<i>Dinner:</i>					
4 oz. lean mutton.....	0.68	0.24	.....	3	12 cents per lb.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
16 oz. potatoes.....	0.32	.....	3.30	1	60 cents per bu.
<i>Supper:</i>					
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
1 oz. butter.....	.....	0.83	.....	1½	24 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
Totals.....	4.23	2.39	19.30	19½	

Class III.—No. 7.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 oz. codfish.....	1.60	0.02	.....	1¼	10 cents per lb.
1 oz. lard.....	.....	0.99	.....	½	10 cents per lb.
16 oz. potatoes.....	0.32	.....	3.31	1	60 cents per bu.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
<i>Dinner:</i>					
4 oz. fresh fish.....	0.64	0.25	.....	3	12 cents per lb.
4 oz. corn meal.....	0.39	0.18	2.73	½	2 cents per lb.
1 egg.....	0.12	0.12	.....	1¼	16 cents per doz.
<i>Supper:</i>					
16 oz. bread.....	1.12	0.08	8.83	3	3 cents per lb.
½ oz. butter.....	.....	0.41	.....	½	24 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
Totals.....	5.29	2.66	20.04	18½	

CLASS IV.—MORE EXPENSIVE DAILY RATIONS.

Class IV.—No. 1.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 eggs	0.24	0.24	.....	4	24 cents per doz.
8 oz. bread....	0.56	0.04	4.41	3	3 cents per lb.
1 oz. butter.....		0.83	.....	1½	24 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	4	8 cents per qt.
<i>Dinner:</i>					
1 oz. bacon.....	0.14	0.37	.....	½	12 cents per lb.
1 oz. string beans.....	0.03	.....	0.06	1	16 cents per lb.
8 oz. mutton.....	1.36	0.48	.....	8	16 cents per lb.
16 oz. potatoes.....	0.32	.....	3.31	1	60 cents per bu.
8 oz. bread.....	0.56	0.04	4.41	3	3 cents per lb.
<i>Supper:</i>					
1 oz. dried fruit.....	0.02	.....	0.55	1½	20 cents per lb.
1 oz. sugar.....		.....	0.94	½	8 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	4	8 cents per qt.
8 oz. bread.....	0.56	0.04	4.41	3	3 cents per lb.
Totals.....	4.97	3.18	19.61	35	

Class IV.—No. 2.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i> 4 oz. berries.....	0.02	.....	0.40	2	8 cents per lb.
½ oz. sugar.....			0.47	¾	8 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	4	8 cents per qt.
4 oz. chicken (broiled).....	0.80	0.16	.....	3½	12½ cents per lb.
1 oz. butter.....		0.83	.....	1½	24 cents per lb.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
1 cup coffee, 8-oz.....			.....	¾	27 cents per lb.
<i>Dinner:</i> 4 oz. beef.....	0.84	0.22	.....	3½	14 cents per lb.
2 oz. rice (as croquettes).....	0.16	0.02	1.53	1	8 cents per lb.
1 egg.....	0.12	0.12	.....	1½	24 cents per doz.
½ oz. lard.....		0.49	.....	5 16	10 cents per lb.
2 oz. macaroni.....	0.18	.....	1.52	2½	20 cents per lb.
1 oz. fat cheese.....	0.25	0.29	0.02	¾	12 cents per lb.
16 oz. potatoes.....	0.32	.....	3.31	1	60 cents per bu.
4 oz. bread.....	0.28	0.02	2.20	¾	3 cents per lb.
<i>Supper:</i> 8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
½ pt milk.....	0.27	0.28	0.38	2	8 cents per qt.
Totals.....	4.90	2.98	19.11	27 5 6	

Class IV.—No. 3.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
4 oz. beef.....	0.84	0.22	.....	4	16 cents per lb.
1 oz. butter.....	.....	0.83	.....	1½	24 cents per lb.
4 oz. bread.....	0.28	0.02	2.20	¾	3 cents per lb.
½ oz. sugar.....	.....	.....	0.47	½	8 cents per lb.
1 cup coffee, 8 oz. ....	.....	.....	.....	¾	27 cents per lb.
<i>Dinner:</i>					
2 oz. pork.....	0.29	0.75	.....	1½	12 cents per lb.
2 oz. beans.....	0.46	0.04	1.07	½	4 cents per lb.
8 oz. potatoes.....	0.16	.....	1.65	½	60 cents per bu.
2 oz. starch.....	.....	.....	1.67	2	16 cents per lb.
1½ oz. sugar.....	.....	.....	1.41	¾	8 cents per lb.
2 oz. dried fruit.....	0.05	.....	1.11	2½	20 cents per lb.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
<i>Supper:</i>					
4 oz. lean mutton.....	0.68	0.24	.....	4	16 cents per lb.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
2 cups coffee, 8 oz. each.....	.....	.....	.....	1½	27 cents per lb.
Totals.....	4.15	2.76	18.78	24½	

Class IV.—No. 4.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 oz. oat meal.....	0.29	0.12	1.30	½	4 cents per lb.
1 oz. sugar.....	.....	.....	0.94	½	8 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
1 oz. butter.....	.....	0.83	.....	1½	24 cents per lb.
2 oz. mackerel.....	0.46	0.13	.....	1½	12 cents per lb.
4 oz. bread.....	0.28	0.02	2.20	¾	3 cents per lb.
<i>Dinner:</i>					
4 oz. chicken.....	0.80	0.16	.....	4	6 cents per lb.
16 oz. potatoes.....	0.32	.....	3.30	1	60 cents per bu.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
<i>Supper:</i>					
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
8 oz. fruit (as sauce).....	.....	.....	0.80	1	\$1 per bu.
1 oz. sugar.....	.....	.....	0.94	½	8 cents per lb.
Totals.....	4.35	2.48	19.82	20½	

Class IV.—No. 5.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
2 oz. sausage.....	0.57	0.80	-----	2	16 cents per lb.
1 oz. butter .....	.....	0.83	-----	1½	24 cents per lb.
1 oz. sugar .....	.....	.....	0.94	½	8 cents per lb.
1 pt. milk	0.54	0.57	0.76	3	6 cents per qt.
4 oz. bread	0.28	0.02	2.20	½	3 cents per lb.
2 cups coffee, 8 oz. each.....	.....	.....	.....	1½	27 cents per lb.
<i>Dinner:</i>					
4 oz. lean beef	0.84	0.04	-----	4	16 cents per lb.
16 oz. potatoes	0.32	.....	3.30	1	60 cents per bu.
2 oz. macaroni	0.18	.....	1.53	2½	20 cents per lb.
8 oz. bread	0.56	0.04	4.41	1½	3 cents per lb.
<i>Supper:</i>					
1 pt. milk	0.54	0.57	0.76	3	6 cents per qt.
1 oz. sugar .....	.....	.....	0.94	½	8 cents per lb.
8 oz. bread	0.56	0.04	4.41	1½	3 cents per lb.
1 cup coffee, 8 oz. ....	.....	.....	.....	½	27 cents per lb.
Totals.....	4.39	2.85	19.25	23½	

Class IV.—No. 6.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
4 oz. pork (lean).....	0.80	0.28	-----	3	12 cents per lb.
8 oz. bread	0.56	0.04	4.41	1½	3 cents per lb.
½ pt. milk	0.27	0.27	0.38	1½	6 cents per qt.
½ oz. sugar .....	.....	.....	0.47	½	8 cents per lb.
1 cup coffee, 8 oz. ....	.....	.....	.....	½	27 cents per lb.
<i>Dinner:</i>					
2 oz. fat cheese	0.50	0.58	.....	1½	12 cents per lb.
16 oz. potatoes.....	0.32	.....	3.31	1	60 cents per bu.
8 oz. bread.....	0.56	0.04	4.41	1½	3 cents per lb.
<i>Supper:</i>					
10 oz. bread.....	0.70	0.05	5.52	2	3 cents per lb.
16 oz. potatoes.....	0.32	.....	3.31	1	60 cents per bu.
½ pt. milk	0.27	0.28	0.38	1½	6 cents per qt.
½ oz. sugar .....	.....	.....	0.47	½	8 cents per lb.
2 cups coffee, 8 oz. each .....	.....	.....	.....	1½	27 cents per lb.
1 oz. butter.....	.....	0.83	.....	1½	24 cents per lb.
Totals.....	4.20	2.37	22.46	18½	

Class IV.—No. 7.

Foods.—Quantities.	Proteids. Ounces.	Fats. Ounces.	Carbo- hydrates. Ounces.	Cost. Cents.	At the rate of
<i>Breakfast:</i>					
4 oz. cracked wheat.....	0.50	0.07	2.56	¾	4 cents per lb.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
4 oz. cold beef.....	0.84	0.22	.....	4	16 cents per lb.
1 egg.....	0.12	0.12	.....	2	24 cents per doz.
8 oz. potatoes.....	0.16	.....	1.65	½	60 cents per bu.
1 cup of coffee, 8 oz.....	.....	.....	.....	½	27 cents per lb.
4 oz. bread.....	0.28	0.02	2.20	¾	3 cents per lb.
<i>Dinner:</i>					
4 oz. roast beef.....	0.84	0.22	.....	4	16 cents per lb.
4 oz. wheat flour (as Yorkshire pudding).....	0.40	0.04	3.00	¾	3 cents per lb.
1 egg.....	0.12	0.12	.....	2	24 cents per doz.
½ pt. milk.....	0.27	0.28	0.38	1½	6 cents per qt.
16 oz. potatoes.....	0.32	.....	3.30	1	60 cents per bu.
<i>Supper:</i>					
8 oz. corn meal (as mush).....	0.78	0.36	5.47	1	2 cents per lb.
1 pt. milk.....	0.54	0.57	0.76	3	6 cents per qt.
Totals.....	4.92	2.26	19.60	23½	

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